

Notice of Allowability

Application No.

10/676,902

Applicant(s)

SCHNORR ET AL.

Examiner

Kagnew H. Gebreyesus

Art Unit

1656

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/22/06.
2. ☒ The allowed claim(s) is/are 74,76,77,79,80 and 82-101.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☒ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date <u>12/22/06</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on December 22nd, 2007 has been entered.

Specification: On page 3 of the specification, delete hyperlink: "(http://afmb.cnrs-mrs.fr/CAZY/)".

Replace line 1-7 of claim 74 with:

An isolated glycoside hydrolase 61 (GH-61) polypeptide which is **selected from the group consisting of:**

(a) a polypeptide that has an amino acid sequence which has at least 95% identity to: amino acids 1-216 of SEQ ID NO: 2, amino acids 1-304 of SEQ ID NO: 4, **or** amino acids 1-204 of SEQ ID NO: 6;

(b) a polypeptide which is encoded by a nucleotide sequence which hybridizes under **high** stringency conditions with any of the following polynucleotide probes:

Claim 86: add at the end of the claim **"respectively"**.

Claims 74, 76-77, 79-80, 82-101 are allowed.

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The closest prior art to the invention in the instant application comprises f Saloheimo et al., (1997) or Ito et al (2001) who teach GH61 polypeptides. However Saloheimo et al., (1997) or Ito et al (2001) do not teach the specific sequence of the GH61 taught by Applicants (claims 74-76-77, 79-80, 82-87, 94-101), or a method of preparing an edible product comprising adding a GH61 polypeptide to a dough (claims 88-93).

Furthermore, US PAT 6,365,204 B1 (Spendler et al.) discloses a process of preparing a dough or baked product that comprises an anti-staling amylase. The bread made using this composition shows improved softness. However the specific enzyme disclosed by Spendler et al does not anticipate the specific sequence of the GH61 disclosed by Applicants.

US PAT 5,610,048 (Schulein et al.) discloses a xylanase preparation from Hemicola insolenes DSM 1800 used in a method of preparing wheat bread comprising wheat dough and said xylanase preparation. However the specific enzyme disclosed by Schulein et al does not anticipate the specific sequence of the GH61 disclosed by Applicants.

Thus the isolated polypeptide sequences of SEQ ID NO: 2, 4 and 6 and variants having at least 95% identity to said polypeptide sequences, a method of preparing an edible product using said polypeptides, a composition of dough comprising said polypeptide(s) have not been disclosed by the prior art. Therefore claims 74, 76-77, 79-80, 82-101 are allowed.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kagnew H. Gebreyesus whose telephone number is 571-272-2937. The examiner can normally be reached on 8:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathleen Kerr Bragdon can be reached on 571-272-0931. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kagnew Gebreyesus PhD.
May 14, 2007
KHG

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